

Title (en)  
MECHANICAL PENCIL

Title (de)  
MECHANISCHER STIFT

Title (fr)  
PORTEMINES

Publication  
**EP 3450197 A4 20191127 (EN)**

Application  
**EP 17789635 A 20170427**

Priority  
• JP 2016088667 A 20160427  
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Abstract (en)  
[origin: EP3450197A1] A mechanical pencil according to an embodiment includes: a barrel; a cushion spring that has a rear end supported by the barrel; a sleeve that is biased forward in an axial direction by the cushion spring and movable in a direction perpendicular to the axial direction by an impact applied from outside of the barrel in an elastically supported state; a chuck spring that has a front end supported by the sleeve; a chuck that chucks a writing lead for a mechanical pencil; a writing lead tube that is fitted to the chuck and biased rearward in the axial direction together with the chuck by the chuck spring; and a contact sliding part that suppresses movement of the sleeve in the direction perpendicular to the axial direction.

IPC 8 full level  
**B43K 21/16** (2006.01); **B43K 21/00** (2006.01)

CPC (source: EP KR US)  
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**B43K 21/22** (2013.01 - EP KR US)

Citation (search report)  
• [XA] EP 1118476 A2 20010725 - KOTOBUKI & CO LTD [JP]  
• [A] EP 0715968 A1 19960612 - KOTOBUKI & CO LTD [JP]  
• [A] US 4205924 A 19800603 - SUMITA YO [JP]  
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• [A] US 2016039243 A1 20160211 - AIZAWA YOSHITOSHI [JP], et al  
• [A] US 4106874 A 19780815 - TORII OSAMU  
• [A] JP 2016036949 A 20160322 - ZEBRA PEN CORP  
• [A] JP S56156689 U 19811121  
• See references of WO 2017188353A1

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**EP 3450197 A1 20190306; EP 3450197 A4 20191127; CN 108698433 A 20181023; CN 108698433 B 20200522; JP 6700381 B2 20200527;**  
JP WO2017188353 A1 20190322; KR 102174751 B1 20201105; KR 20180135443 A 20181220; US 10603948 B2 20200331;  
US 2019054756 A1 20190221; WO 2017188353 A1 20171102

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